Bioterrorism Training and Curriculum Development Program (BTCDP): Education and Training Activities at the State and Local Levels

January 23, 2004

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BTCDP

- BTCDP Overview
- Education and Training Activities funded by BTCDP
 - ◆ Topics/Subject Matter
 - Mode/Method of Delivery
 - ◆ Target Audience/Number of Participants
 - ◆ Selected Examples



Bioterrorism Training and Curriculum Development Program (BTCDP)





BTCDP Purpose

- Development of a health care workforce that possesses the Knowledge Skills, and Abilities (KSAs) to:
 - **◆ Recognize** indications of a terrorist event
 - **◆ Treat** patients and communities in a safe and appropriate manner
 - **→ Participate** in a coordinated multi-disciplinary community response
 - ◆ Alert the public health system rapidly and effectively

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Two Separate BTCDP Components

 Provision of <u>Continuing Education</u> (CE) for Practicing Providers

<u>Curricular Enhancement/Curriculum</u>
 <u>Development</u> (CD) in Health Professions
 Schools



Continuing Education & Curriculum Development Awards are funded to:

- Develop/Revise and implement training reflecting a <u>two-tiered</u> curriculum:
 - ◆ Discipline-appropriate and clinicallyoriented material
 - ◆ Response team coordination and collaboration on terrorist events
 - Roles and responsibilities
 - Drills, exercises, and simulations



Continuing Education & Curriculum Development Core Competencies

- Where competencies for bioterrorism preparedness training have been developed for specific professions (e.g., medicine, nursing, public health), they should be incorporated into:
 - Training program design
 - Specific curricula and training courses
 - Evaluation of trainees



BTCDP FY 2003

Available funds: \$26.5 M

◆ Total CE: \$22.2

◆ Total CD: \$4.3

■ Awards: 32

◆ Total CE: 19

◆ Total CD: 13

■ Estimated Trainees*: 193,314

◆ Total CE: 173,786

◆ Total CD: 19,528

*Estimates are from entire two-year project period

CE = Continuing Education

CD = Curriculum Development



Continuing Education (CE) FY 2003 Awards

■ CE Cooperative Agreements Awards: 19

◆ Total CE Budget: \$22,225,294

◆ Range of Awards: \$399,597 - \$1.8 M

◆ Average Award: \$1.2 M

◆ Average # of Disciplines: 7

◆ Estimated CE Trainees 01 Year: 61,831

◆ Estimated CE Trainees 02 Year: 111,955

◆ Total Estimated CE Trainees: 173,786



Continuing Education FY 2003 Awardees

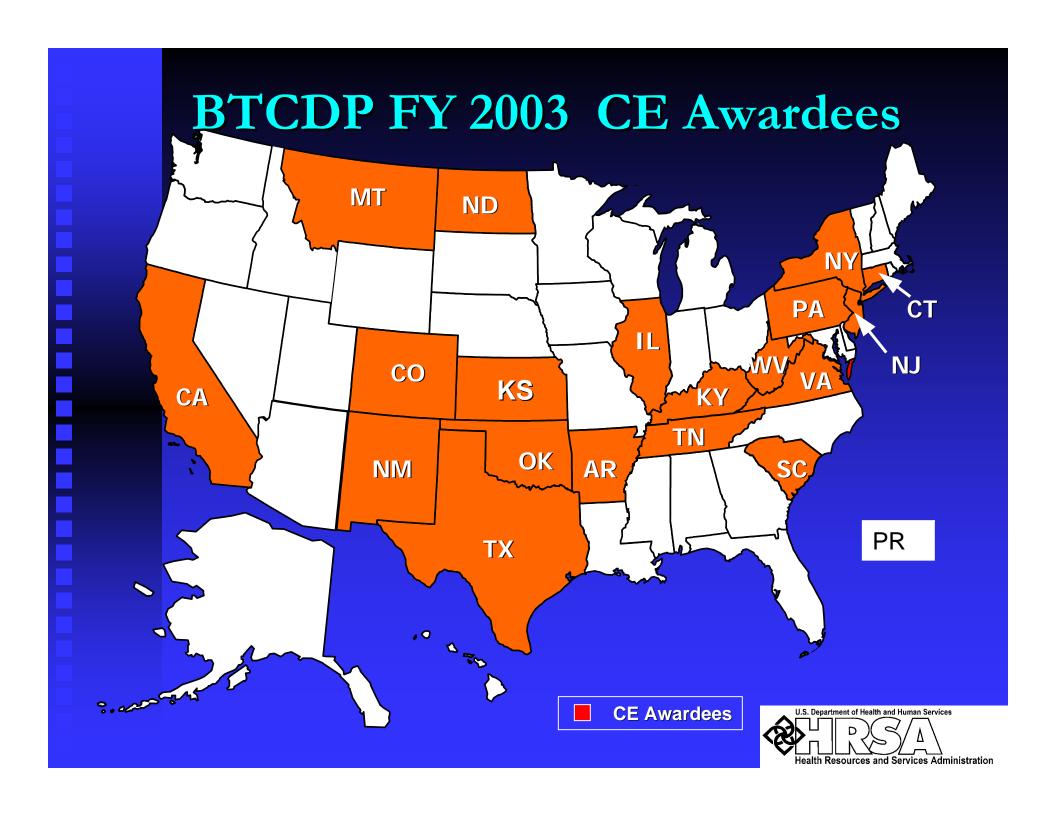
- AR: University of Arkansas for Medical Sciences
- CA: University of California, San Francisco
- CO: Denver Health and Hospital Authority
- CT: Yale New Haven Health System
- IL: Metropolitan Chicago Hospital Council
- KS: University of Kansas Medical Center
- KY:University of Louisville Research Foundation
- MT: St. Vincent Foundation
- ND: University of North Dakota



Continuing Education FY 2003 Awardees

- NJ: Univ. of Medicine and Dentistry of New Jersey
- NM: Univ. of New Mexico Health Science Center
- NY: The Trustees of Columbia University
- OK: Oklahoma Area Health Education Center
- PA: Thomas Jefferson University Hospital
- SC: Medical University of South Carolina
- TN: University of Tennessee Health Science Center
- TX: University of Texas HSC at Houston
- VA: Virginia Commonwealth University
- WV: West Virginia University





Curriculum Development (CD) FY 2003 Awards

■ CD Cooperative Agreements Awards: <u>13</u>

◆ Total CD Budget: \$4,221,541

◆ Range of Awards: \$201,454 - \$459,222

◆ Average Award: \$351,795

◆ Estimated CD Trainees 01 Year: 2,944

◆ Estimated CD Trainees 02 Year: 16,584

◆ Total Estimated CD Trainees: 19,528



Curriculum Development FY 2003 Awardees

- University of Arkansas for Medical Sciences
- Regents for the University of California
- University of Hawaii, John A. Burns Medical School
- Board of Trustees at the University of Illinois
- University of Montana
- Regents for the University of Nebraska Medical Center
- University of Medicine and Dentistry of New Jersey
- Trustees of Columbia University
- Ohio State University Research Foundation
- Vanderbilt University Medical Center
- University of Texas Health Science Center-San Antonio
- Shenandoah University (Virginia)
- University of Washington



Curriculum Development Disciplines

- Primary Disciplines:
 - ♦ 5 Medicine
 - ◆ 2 Nursing
 - ◆ 3 Allied Health
 - Other Primary Disciplines:
 - 1 Multiple Health Professions
 - 1 Pharmacy
 - ◆ 1 Public Health



Needs Assessment

- Funded programs are refining the initial needs assessment by carrying out the following:
 - ◆ Collaborate with other DHHS Programs
 - Centers for Disease Control and Prevention (CDC)
 Public Health Preparedness and Response for Bioterrorism Program
 - ♦ HRSA Bioterrorism Hospital Preparedness Program
 - ◆ Utilize BHPr data sources regarding licensed health professionals in state
 - ◆ Identify gaps:
 - Disciplines/trainees that have not received CE
 - Disciplines which have not developed core competencies for bioterrorism preparedness training

Evaluation

- Tied explicitly to project objectives
- Will specify what data will be collected and the method for collection
- Utilize existing discipline-specific competencies for bioterrorism preparedness training to:
 - ◆ Measure and evaluate the objectives and outcomes presented in curricula and training courses
 - Measure and evaluate the demonstrated knowledge, skills, and abilities of trainees in response simulations/drills/exercises

Topics/Subject Matter

- Basic Emergency Preparedness
 - ◆ History of Bioterrormism and Public Health Emergencies
 - ◆ Basic Emergency: Awareness and Roles
 - ◆ Disasters and Disaster Preparedness
 - ◆ Public Health Response and Chain of Command
 - ◆ Clear Communication to the Public
 - ◆ Media/Communications
- Biological Emergencies
 - ◆ Biohazards and Biosafety
 - Biological Agents
 - ◆ Bioterrorism Agents
 - ◆ Common Bioterrorism Agents and Common Pharmaceutical Responses

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Topics/Subject Matter (cont.)

- Chemical Emergencies
 - ◆ Chemical Warfare Agents
- Nuclear/Radiation Emergencies
- Explosive Events
- Infectious Diseases
 - **♦** Surveillance
 - ◆ Emerging Infections
 - ◆ Infection Control
 - ◆ Lab Practices
 - Microbiology



Topics/Subject Matter (cont.)

- Mass Care
 - Mass Casualty
 - ◆ Surge Capacity
 - ◆ Recognition of Clinical Syndromes
 - ◆ Triage in and out of Hospital Settings
 - Decontamination and Personnel Protective Equipment
 - ◆ Facilities and Resource Management
 - Organizational Consultation
 - Post-Exposure Patient Management
- Psychological Response
 - Acute Mental Health Intervention
 - ◆ Self-care for Health Professionals



Topics/Subject Matter (cont.)

- Response Issues
 - ◆ Integrated Approach to Bioterrorism Response
 - Multidisciplinary, Culturally-Sensitive Team Training
 - ◆ Discipline-Specific Response to Emergencies
 - Pharmacy Logistics
- Special Issues
 - ◆ Pediatric Applications and Special Conditions
 - Attacks on Food Supply: Surveillance and Response
 - ◆ Agricultural and Veterinary Threats



Mode/Method of Delivery

- Face-to-Face
 - ◆ Face-to-Face Classroom Discussion
 - Multi-segmented Course with E-mail Drill (paper patient cases with constellations of symptoms)
 - ◆ 25 Module Bioterrorism Course offered in 16week semester, Intensive Session, or Combination
 - ◆ Train the Trainer Modules
 - Simulations Technology



Mode/Method of Delivery (cont.)

- Self-Paced
 - ◆ Self-study Scenario Based Case Studies
 - ◆ Self-paced Learning Manuals
 - ◆ Video taped lectures
 - Audio taped lectures
 - ◆ CD Based Instruction



Mode/Method of Delivery (cont.)

- Web-Based
 - ◆ Teleconferencing
 - Web Based Interactive Classroom (chat rooms and dialogue center)
 - ♦ Web Based Educational Modules
 - ◆ One Hour Interactive Workshops
 - ◆ Live, Digital Video and Archived Webcasts
 - ◆ Television Broadcasts
- Tabletop Drills and Exercises



Continuing Education Target Professions

Target Profession	Estimate of CE Trainees Year 01	Estimate of CE Trainees Year 02
S		
Health Center Administrators	327	297
Allied Health Providers	4,883	7,004
Nursing	23,716	44,944
Medicine	10,814	25,561
Nurse Practitioners	2,777	4,731
Physician Assistants	849	1,924
Dentists	1,351	1,966
Pharmacists	2,182	3,800
Mental Health Providers	3,142	4,250
Public Health Providers	728	1,363
EMTs	6,708	9,335
Veterinarians	254	254
Others	4,100	6,526
Total	61,831	111,955 U.S. Department of Health and Human Se

Curriculum Development Targeted Disciplines

Target Disciplines	Estimated CD Trainees Year 01	Estimated CD Trainees Year 02
Allied Health	288	6,433
Nursing	817	2,568
Medicine	601	4,217
Nurse Practitioner	190	403
Physician Assistants	169	405
Dentistry	167	526
Pharmacy	566	1,058
Mental Health	0	0
Public Health	48	382
EMS/EMT	15	270
Other	83	312
Total	2,944	16,584



Selected Examples



University of New Mexico Health Science Center (CE Awardee)

- Providers receiving CE in Yr 1 = 6,078
 - ◆ Face-to-Face Courses = 3,605
 - ◆ Distance Learning Courses = 2,473
- Providers receiving CE in Yr 2 = 8,040
 - ◆ Face-to-Face Courses = 4,505
 - ◆ Distance Learning Courses = 3,535
- Number of Disciplines = 10
- Face-to-Face Courses = 966
- Distance Learning Courses (DL) = 270
- Average Number of Contact Hours per Course = 30



Medical University of South Carolina (CE Awardee)

- Providers receiving CE in Yr 1 = 4,770
 - ◆ Face-to-Face Courses = 3,720
 - ◆ Distance Learning Courses = 1,050
- Providers receiving CE in Yr 2 = 5,700
 - ◆ Face-to-Face Courses = 4,050
 - ◆ Distance Learning Courses = 1,650
- Number of Disciplines = 8
- Face-to-Face Courses = 243
- Distance Learning Courses (DL) = 17
- Average Number of Contact Hours per Course = 4



University of Texas Health Science Center at Houston (CE Awardee)

- Providers receiving CE in Yr 1 = 9,500
 - ◆ Face-to-Face Courses = 7,602
 - ◆ Distance Learning Courses = 1,898
- Providers receiving CE in Yr 2 = 9,500
 - ◆ Face-to-Face Courses = 7,602
 - ◆ Distance Learning Courses = 1,898
- Number of Disciplines = 9
- Face-to-Face Courses = 256
- Distance Learning Courses (DL) = 64
- Average Number of Contact Hours per Course = 3



University of Texas Health Science Center at San Antonio (CD Awardee)

- Students = 5,192 by Yr 2
- Disciplines = 22 different allied health disciplines plus 2 health science magnet schools and a *Promotoras* program
- Total Number of Programs/Courses = 32 at 7 different locations



Vanderbilt University School of Nursing (CD Awardee)

- Students in Yr 1 = 278
 - ◆ Face-to-Face Courses = 174
 - ◆ Distance Learning Courses = 104
- Students in Yr 2 = 356
 - ◆ Face-to-Face Courses = 206
 - ◆ Distance Learning Courses = 150
- Number of Disciplines = 4
- Face-to-Face Courses = 20
- Distance Learning Courses (DL) = 16
- Average Number of Contact Hours per Course = 26 hours for Face-to-Face

2 hours for DL

Thank You

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